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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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901 NORTH GLEBE ROAD, 11TH FLOOR				
ARLINGTON, VA 22203				
EXAMINER				
MORAN, KATHERINE M				
ART UNIT		PAPER NUMBER		
3765				
MAIL DATE		DELIVERY MODE		
06/13/2011		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/578,864

**Applicant(s)**

LANG ET AL.

**Examiner**

KATHERINE MORAN

**Art Unit**

3765

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 May 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 22-53 is/are pending in the application.
- 4a) Of the above claim(s) 33-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 22-25, 29-32 and 51-53 is/are rejected.
- 7) ☒ Claim(s) 8, 9 and 26-28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Please note this office action replaces the advisory action of 5/31/11, sent in error.

#### ***Response to Amendment***

Applicant's response of 5/21/11 has been received. Claims 1, 8, 26, and 51 are amended, new claims 52 and 53 are added and claims 1-9 and 22-53 are pending, with claims 33-50 withdrawn.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 52 and 53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no claim antecedent for "the patient's ear".
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 31, 32, and 51-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Heine (U.S. 4,675,919). Heine discloses the invention as claimed. Heine teaches a headband arrangement 1 for applying to a breathing mask to a user and having a flexible band body 2 comprising upper and lower band portions 1,2 for transmitting the mask holding forces required for applying the breathing mask wherein the upper and lower band portions are made of a foamed plastic material including molded foam. The upper and lower band portions include a pair of upper and lower

band portions 1,2 for transmitting the mask holding forces. The upper band is adapted to transmit mask holding forces to an upper portion of the mask and the lower band portion is adapted to transmit mask holding forces to a lower portion of the mask in that the band portions are adapted for receipt of a mask. The upper band portion is adapted to extend over the patient's ear and the lower band portion is adapted to extend below the patient's ear in that the upper band portion lies in a plane over that of the ear and the lower band portion could be placed such that it extends below the patient's ear. Further, wearer's head sizes vary and as such, the lower band portion position will vary depending upon the head size.

5. Claim 22 is under 35 U.S.C. 102(b) as being anticipated by Magidson '062. Magidson discloses the invention as claimed. Magidson teaches a headband arrangement 12 for a mask comprising an upper headband portion 16 adapted to transmit mask holding forces to an upper portion of the mask and a lower headband portion 16 adapted to transmit mask holding forces to a lower portion of the mask, at least one headband portion of the upper and lower headband portions including a longitudinal recess 18/20 and a mask connector in the form of an insert 22 embedded into the recess of the at least one headband portion, the connector structured to allow the mask to be attached to the headband arrangement in an adjustable manner. The upper headband portion is represented by one half of the band body and the lower headband portion is represented by the other half of the band body.

6. Claims 1-7, 23-25, 29, 30, and 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Magidson (U.S. 5,829,062) in view of Heine '919. Magidson

discloses the invention as claimed. Magidson teaches a headband arrangement 12 for applying a breathing mask to a user and having a flexible band body 16 comprising upper and lower band portions for transmitting the mask holding forces required for applying the mask, wherein at least portions of the body are made of a plastic material. The upper band portion is adapted to transmit mask holding forces to an upper portion of the mask and the lower band portion is adapted to transmit mask holding forces to a lower portion of the mask in that a mask structure could be attached to the upper band and lower band portions. Regarding claim 2, "band body formed by injecting a pore-forming plastic material in a molding space of a tool" is a product by process limitation and as such, does not receive patentable weight in an apparatus claim. Magidson teaches a structurally equivalent headband means and the use of injection molding in column 2, lines 8-20. As discussed in MPEP 2113, when the product by process claim is limited by and defined by the process, determination of patentability is based on the product itself. The patentability of the product does not depend on its method of production. If the product in the product by process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. Therefore, only the claimed structure is considered when assessing patentability. The plastic material has a skin in the area of its outer surface in that the outer surface of the plastic acts as a covering to the inner plastic material. Insert 22 is embedded into a longitudinal recess 18/20 of the headband portion and the insert/connector includes a locking structure (shown in Figure 6 as those portions of the insert which are coextensive with the edge of the band body and uncovered by the

plastic material). The insert 22 is a dimensionally stable insert and the locking structure is structured to couple a band bracket portion in an adjustable manner and is structured to allow the mask to be attached to the headband arrangement in an adjustable manner. The locking structure is formed integrally with the plastic material. It is noted that the claim doesn't further discuss the features of the locking structure and therefore the uncovered locking structure is considered capable of receipt of a band bracket portion. The upper band portion is adapted to extend over the patient's ear and the lower band portion is adapted to extend below the patient's ear. The upper band portion extends in a plane over the patient's ear and the lower band portion extends below the patient's ear. However, Magidson doesn't teach the headband portion made of a foamed plastic material. Heine teaches headband portions 2 made of foam plastic. Heine describes the foam plastic as being soft and providing a cushioning effect. Therefore, it would have been obvious to one of ordinary skill in the art to substitute foamed plastic for the plastic used by Magidson in order to provide a softer interface against the wearer's head.

### ***Response to Arguments***

7. Regarding Applicant's arguments, Applicant submits that Heine doesn't disclose a headband arrangement including upper and lower band portions adapted to transmit mask holding forces to upper and lower portions of a breathing mask. The Examiner disagrees and submits that Heine's band portion is formed from the same material as that of the claimed invention and is structurally equivalent to the claimed headband arrangement. Heine's band body is adapted to be coupled to a device and since the

structural specifics of the mask are unknown, it is possible that the mask is structured such that it would couple to the upper and lower band portions. When a mask is coupled to the band portions, mask holding forces are inherently transmitted from the band portions to the mask.

Applicant also submits that Magidson fails to teach upper and lower headband portions for transmitting mask holding forces. Magidson's band body includes upper and lower portions as set forth in the rejection. The claims do not further describe the structure of the upper and lower band portions in relation to one another. Magidson's element 22 is equivalent to the mask connector in the form of an insert as claimed. The claim recites the locking structure as "structured to couple a band bracket portion in an adjustable manner." How is the claimed locking structure distinct from that of the exposed portions of element 22? Magidson's exposed insert portions are considered capable of receipt of a band bracket portion in an adjustable manner.

Applicant submits that the modification of Magidson with Heine lacks reason or motivation to combine. The Examiner disagrees and submits that the modification of a plastic material to form a foamed plastic material is an obvious modification in that Magidson's and Heine's devices are analogous and both are worn on the head and a foam plastic material provides a cushioning effect.

***Allowable Subject Matter***

8. Claims 8, 9, and 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

/KATHERINE MORAN/

Primary Examiner, Art Unit 3765